1   --2. A method for distributing application, system and network specification information to

2   functional elements controlling N hosts instantiating M managed characteristic applications in a

3   distributed environment, comprising:

4   preparing first specification files in a language providing a syntax adapted to describe system

5   and network specification information;

6   preparing second specification files in the language providing application software system

7   structure, capabilities, dependencies, and requirements for the M managed characteristic

8   applications;

9   compiling the first and second specification files to thereby generate specification objects;

10   and

11   providing an application programming interface (API) permitting the functional elements to

12   access the specification information using API calls.--

1   --3. The method as recited in claim 2, wherein the second specification files describe the

2   application software system   structure in terms of systems, subsystems, paths, applications and

3   processes.--

1   --4. The method as recited in claim 2, wherein the second specification files further provide

2   Quality of Service (QoS) requirements on an event basis.--

1   --5. The method as recited in claim 2, wherein the second specification files further provide

2   survivability requirements for the M managed characteristic applications.--

1   --6. The method as recited in claim 2, wherein the second specification files further provide

2   data flow path requirements in terms of both structure and Quality of Service (QoS) requirements

3   for the M managed characteristic applications.--

1   --7. The method as recited in claim 2, wherein one of the M managed characteristic

applications comprises a scalable application.--

1   --8. The method as recited in claim 2, wherein one of the M managed characteristic

2   applications comprises a fault tolerant application, where the degree of fault tolerance is selectable

3   by a user.--

1   --9. The method as recited in claim 2, wherein one of the M managed characteristic

2   applications comprises a selectable priority application.--

1   --10. The method as recited in claim 2, wherein the second specification files identify a script

2   file to be employed when a respective of the M managed characteristic applications is shut down.--

1   --11. The method as recited in claim 2, wherein the second specification files identify a

2   signal to be employed to indicate when a respective of the M managed characteristic applications

3   is to be shut down.--

1   --12. The method as recited in claim 2, wherein the second specification files further provide

2   environmental variables associated with the M managed characteristic applications.--

1   --13. The method as recited in claim 2, wherein the second specification files further provide

2   command line arguments associated with the M managed characteristic applications.--

1   --14. The method as recited in claim 2, wherein the second specification files further provide

2   command line arguments requiring resolution at application runtime associated with the M managed

3   characteristic applications.--

1   --15. The method as recited in claim 2, wherein the second specification files further provide

2   startup and shutdown dependencies between the M managed characteristic applications.--

1   --16. The method as recited in claim 2, wherein the second specification files further provide

2   startup and shutdown dependencies between applications including the M managed characteristic

3   applications.--

1   --17. The method as recited in claim 2, wherein the second specification files further provide

2   application states defined in terms of received instrumentation data values, the length of time a

3   respective application has been running, and/or the set of processes that are currently running.--

1   --18. The method as recited in claim 2, wherein:

2   one of the M managed characteristic applications comprises a scalable application; and

3   one of the second specification files identifies whether the scalable application can be

4   restarted upon failure and the minimum and maximum number of copies of the scalable application

5   that can be instantiated in the distributed environment.--

1   --19. The method as recited in claim 2, wherein:

2   one of the M managed characteristic applications comprises a scalable application; and

3   one of the second specification files identifies the type of scalability practiced by the scalable

4   application.--

1   --20. A method for distributing application, system and network specification information to

2   functional elements including a program control function and a resource manager function controlling

3   N hosts instantiating M managed characteristic applications in a distributed environment, comprising:

4   preparing first specification files in a language providing a syntax adapted to describe system

5   and network specification information;

6   preparing second specification files in the language providing application software system

7   structure, capabilities, dependencies, and requirements for the M managed characteristic applications;

8   compiling the first and second specification files to thereby generate specification objects

9   organized into a system specification library; and

10   linking the program control function and the resource manager function to the system

11   specification library.--

1   --21. The method as recited in claim 20, wherein the second specification files describe the

2   application software system structure in terms of systems, subsystems, paths, applications and

3   processes.--

1   --22. The method as recited in claim 20, wherein the second specification files further provide

2   Quality of Service (QoS) requirements on an event basis.--

1   --23. The method as recited in claim 20, wherein the second specification files further provide

2   survivability requirements for the M managed characteristic applications.--

1   --24. The method as recited in claim 20, wherein the second specification files further provide

2   data flow path requirements in terms of both structure and Quality of Service (QoS) requirements

3   for the M managed characteristic applications.--

1   --25. The method as recited in claim 20, wherein one of the M managed characteristic

2   applications comprises a scalable application.--

1   --26. The method as recited in claim 20, wherein one of the M managed characteristic

2   applications comprises a fault tolerant application, where the degree of fault tolerance is selectable

3   by a user.--

1 --27. The method as recited in claim 20, wherein one of the M managed characteristic

2 applications comprises a selectable priority application.--

1 --28. The method as recited in claim 20, wherein the second specification files identify a

2 script file to be employed when a respective of the M managed characteristic applications is shut

3 down.--

1 --29. The method as recited in claim 20, wherein the second specification files identify a

2 signal to be employed to indicate when a respective of the M managed characteristic applications is

3 to be shut down.--

1 --30. The method as recited in claim 20, wherein the second specification files further provide

2 environmental variables associated with the M managed characteristic applications.--

1 --31. The method as recited in claim 20, wherein the second specification files further provide

2 command line arguments associated with the M managed characteristic applications.--

1 --32. The method as recited in claim 20, wherein the second specification files further provide

2 command line arguments requiring resolution at application runtime associated with the M managed

3 characteristic applications.--

1 --33. The method as recited in claim 20, wherein the second specification files further provide

2 startup and shutdown dependencies between the M managed characteristic applications.--

1   --34. The method as recited in claim 20, wherein the second specification files further provide

2   startup and shutdown dependencies between applications including the M managed characteristic

3   applications.--

1   --35. The method as recited in claim 20, wherein the second specification files further provide

2   application states defined in terms of received instrumentation data values, the length of time a

3   respective application has been running, and/or the set of processes that are currently running.--

1   --36. The method as recited in claim 20, wherein:

2   one of the M managed characteristic applications comprises a scalable application; and

3   one of the second specification files identifies whether the scalable application can be restarted

4   upon failure and the minimum and maximum number of copies of the scalable application that can

5   be instantiated in the distributed environment.--

1   --37. The method as recited in claim 20, wherein:

2   one of the M managed characteristic applications comprises a scalable application; and

3   one of the second specification files identifies the type of scalability practiced by the scalable

4   application.--

REMARKS

Claims 1-37 are pending in the Application. In the Preliminary Amendment, claim 1 is

amended for clarity and new claims 2-37 are added to recite features of the present invention that